Examiner: Phuong, Dai

Art Unit: 2617

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Dany Sylvain

Serial No. 10/693,540

Filed: 10/24/2003

For: CALL TRANSFER FOR AN INTEGRATED WIRELINE AND WIRELESS

SERVICE USING A TEMPORARY DIRECTORY NUMBER

Mail Stop Amendment Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

DECLARATION UNDER 37 C.F.R. § 1.131 OF DANY SYLVAIN

- 1. My name is Dany Sylvain and I am an employee of Nortel Networks, Inc. (hereinafter "Nortel"), a wholly owned subsidiary of the assignee of the present application. I have been employed by Nortel since 1981. As part of my obligations under my Employment Agreement, I am obligated to assign any rights to inventions to the present assignee.
- 2. I am the inventor of Patent Application Serial No. 10/693,540 entitled "CALL TRANSFER FOR AN INTEGRATED WIRELINE AND WIRELESS SERVICE USING A TEMPORARY DIRECTORY NUMBER" (hereinafter "Patent Application").
- 3. I have reviewed claims 1-32 presently pending in the Patent Application (hereinafter "Present Invention").
- 4. At least as early as April 23, 2003, I conceived of the Present Invention as evidenced by the Invention Disclosure entitled "WLAN Call Handoff to Wireless Using Dynamically Assigned Temporary Number," which is attached to this Declaration as Appendix A. The Invention Disclosure specifically referenced and built upon an earlier invention disclosure that I submitted. I conceived of the invention in the earlier submitted invention disclosure at least as early as December 19, 2002, as evidenced by an invention disclosure entitled "Simple Method to Handover WLAN Voice Call to a Cellular Network" (hereinafter "the 15795 invention disclosure"), which is attached as Appendix B. U.S. Patent Application Serial No. 10/409,290 was filed on April 8, 2003 and is directed to the subject matter of the 15795 invention disclosure.

- 5. On April 23, 2003, I completed the Invention Disclosure for the present Patent Application and submitted it to the Intellectual Property Law Department at Nortel. Nortel has a first in, first out policy regarding invention submissions and my Invention Disclosure was considered in the ordinary course of this policy on May 7, 2003, as evidenced by the review form attached as Appendix C.
- 6. Between May 7, 2003, and May 21, 2003, I spoke with Benjamin S. Withrow of the law firm of Withrow & Terranova to assist in preparing a provisional patent application directed to the Invention Disclosure. A provisional application, U.S. Serial No. 60/472,277 (hereinafter "the Provisional Application"), was filed on May 21, 2003, which included the material from the Invention Disclosure. The Provisional Application also incorporated by reference the material from the 15795 invention disclosure (U.S. Patent Application Serial No. 10/409,290). The Provisional Application fully discloses the Present Invention.
- 7. On June 20, 2003, I received a copy of a memo, which is attached as Appendix D, that instructed Benjamin S. Withrow of the law firm of Withrow & Terranova, PLLC to prepare and file a regular utility patent application for the Invention Disclosure that claimed priority to the Provisional Application.
- 8. From a period beginning prior to June 20, 2003 and continuing through October 24, 2003, I met with the attorney Benjamin S. Withrow and worked with him to prepare the Patent Application claiming the invention disclosed in the Invention Disclosure.
- 9. On July 30, 2003, I received a first draft of the Patent Application (hereinafter "First Draft") from Benjamin S. Withrow's assistant, Jennifer Alkove, as evidenced by the e-mail attached to this Declaration as Appendix E.
- 9. Between July 30, 2003, and August 25, 2003, I reviewed the First Draft and provided comments to Benjamin S. Withrow regarding the First Draft.

- 10. On or about August 25, 2003, I received a copy of a revised Patent Application and the inventor declaration and assignment documents from Benjamin S. Withrow's assistant, Jennifer Alkove, as evidenced by the email attached to this Declaration as Exhibit F.
- 11. Upon information and belief, the Patent Application was filed with the U.S. Patent and Trademark Office on October 24, 2003 as Serial No. 10/693,540. The Patent Application claimed priority to the Provisional Application filed May 21, 2003, and incorporated by reference the disclosure of the 15795 invention disclosure (U.S. Patent Application Serial No. 10/409,290).
- 13. I hereby declare that all declarations made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dany Sylvain

Date

Appendix A

Norte: tworks Confidential & Privileged In mation

Invention Disclosure Submission Reply

Disc. No.: 16076RO	Received Date: 23 apr 2003
'Disclosure'	
Title: WLAN call handoff to wireless u	sing dynamically assigned temporary number

1000-271

--- Inventors

Global	· ないないで Nation ex 、 いた。ため、はないは、できた。		ork Info	Tall to the state of the state	Home Info	
150485	HR Name: SYLVAIN, DANY Known As: DANY Email: sylvain@nort clnetworks.com Mgr First Name: STEPHEN Mgr Last Name: ELLIOTT Mgr Global ID: 1010325	Location: Location Control Dept: Phone: Ext Phone: Fax: Ext Fax: MailStop: Citizenship	3A10 3937925 6137637925 6137653313 6137653313 04352H09	Address:	6 RUE D'ANJOU GATINEAU, QC CANADA J8T 6A6 ()8195614981	

____ Attachments ===__

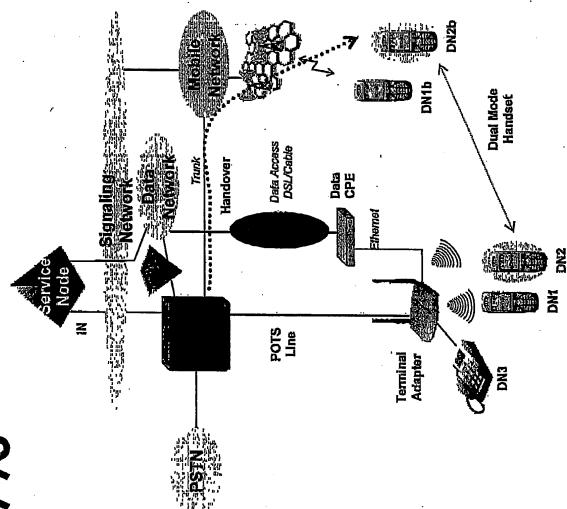
way File Name Program	race Type Type Type Type Type Type Type Typ	# Property and the File Comments The Form	•
Enhanced_WLAN_to_wireless	Microsoft Powerpoint (*.ppt)	·	
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<End of Attachments>

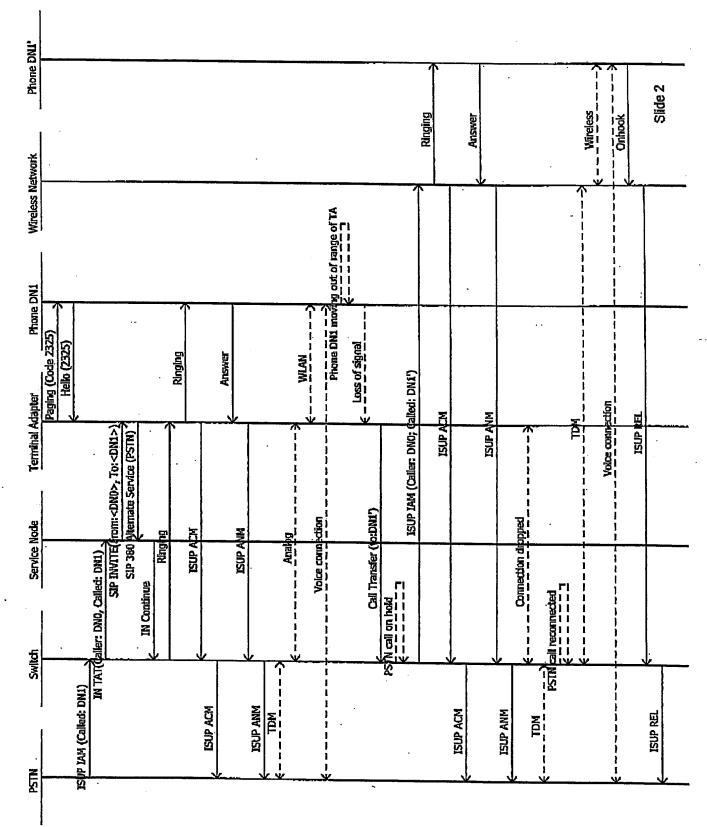
Were there additional inventors involved: no	Was there contractor involvement; no
Name of Supervisor of Divisional Head:	Mame of Price of the Control of the
STEVE ELLIOTT	SUE SPRADLEY
LOB: WIRELINE NETWORKS	TDM PORTFOLIO & SOLUTIONS DELIVERY
. Conception Date:	
Has this invention been discus	ssed with others? If so, please complete:
Inside Nortel - Whom?	Outside Nortel - Whom?.
: . Inside Nortel - When?	Outside Nortel - Whom?.

Norte tworks Confidential & Privileged Ir mation

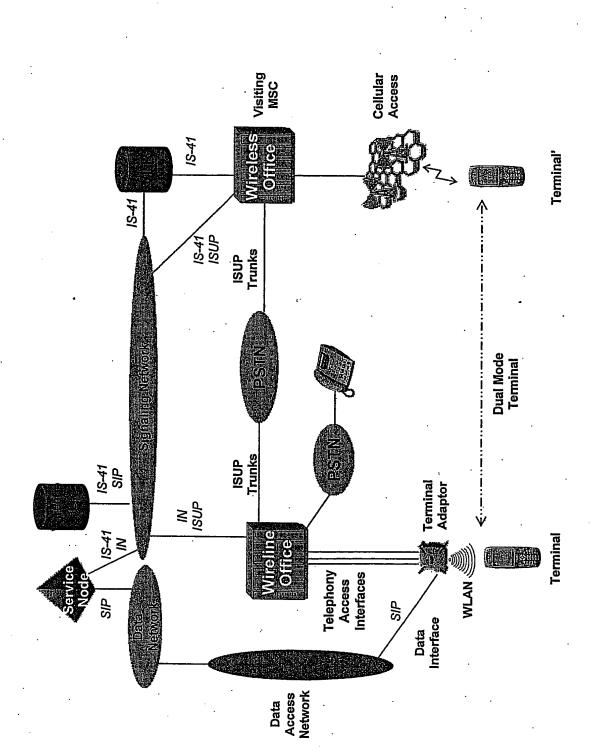
Keywords for Searching: (A) () () ()	Products that will use this invention
Call handoff, WLAN, wireless, cellular, registration,	Succession, IMS, Wireless
·	
1	
Does this invention arise troin any arrangement invo	lving an external organization?
Is this invention relevant to a Standards Activity?	Internal Funding Project##8
no	
Techn	ical Information
Brief Description of the Invention	A super to the state of the sta
Disclosure 15795 described how to transfer a wireline/V	WLAN call to a cellular network to a pre-configured number associated
to the handset when in cellular mode. This invention rem same public phone number to be used for both networks	noves the dependency to assign a pre-configured number and allows the
Problem Solved huitha Invention	عه الله و الله الله الله الله و الله الله
Multiple DN and billing (one per network) simplified to	one DN and bill. In addition, 15795 involved a 5-10 seconds interval to
perform the handoff. By pre-registering the handset in th	e cellular network prior to needing the transfer allows the call handoff to
be accelerated to 2-3 seconds.	
	works 中华、大学、大学、大学、大学、大学、大学、大学、大学、大学、大学、大学、大学、大学、
Pre-provisioned DN: Required configuration work.	
W_ /	1. N
Specific elements or steps that solved the problem a	id how they do it:
See charts.	•
000 that in.	



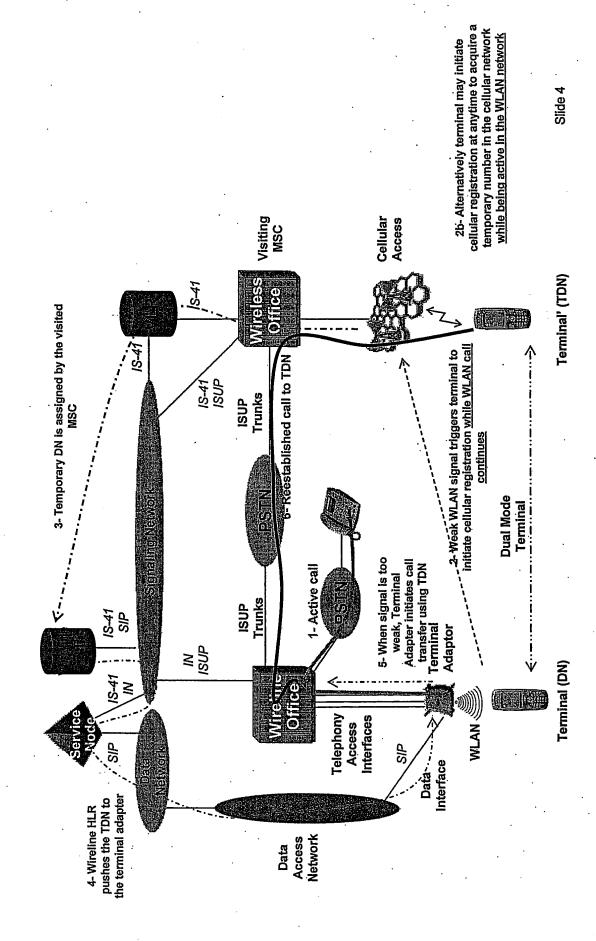
15795



Improved Network



Improved Call handoff to wireless



Appendix B

Nortel Networks Confidential & Privileged Information

Invention Disclosure Submission Reply

Disc No:	15795RO	Received Date:	19 dec 2002
Disclosure			
Title:	Simple method to handover WL	AN voice call to a cellular n	etwork

--- Inventors ==-

Global	Name	W	ork Info		Home Info	
1d 150485 1	HR Name: SYLVAIN, DANY Known As: DANY Email: sylvain@nort elnetworks.com Mgr First Name: STEPHEN Mgr Last Name: ELLIOTT Mgr Global ID: 1010825	1	3A10 3937925 6137637925 6137653313 6137653313 04352H09	Address: Phone:	6 RUE D'ANJOU GATINEAU, QC CANADA J8T 6A6 ()8195614981	

--- Attachments ----

File Name	Fife Type	File Comments	· · · · · · · · · · · · · · · · · · ·
W-CentrexIP.ppt	Microsoft Powerpoint (*.ppt)		
	•		

<End of Attachments>

Were there additional inventors involved: 1	10 Was there contractor involvement: no
Name of Supervisor or Divisional Hea	Name of NB
STEVE ELLIOTT	SUE SPRADLEY
LOB: WIRELINE NETWORKS	Business Unit: CTO/VOIP
Conception Date:	
The second secon	n discussed with others? It so, please complete:
Inside Nortel - Whom?	Outside Nortel - Whom?
Inside Nortel - When?	Outside Nortel - When?
NDA2 no	
Are you aware of any imminer	it future disclosures? Please provide dates and details:

Nortel Networks Confidential & Privileged Information

Keywords for Searching:	Products that will are this invention:
VoIP, WLAN, handover, cellular	DMS, Succession, CentrexIP, Meridian 1
Does this invention arise from any arrangement invol-	ling an external organization?
Is this invention relevant to a Standards Activity?	Internal Funding Project #'s:.
no	

Technical Information

Brief Description of the Invention:

A WLAN is used to provide mobile VoIP based telephony in a home zone. If the user starts moving and gets out of the WLAN home zone, the call will get dropped. To prevent this, the mobile terminal is equipped also with cellular capability and is served by an existing wireless network. As the signal strenght deteriorates, bit error rate will increase and gets detected by the VoIP gateway controlling the WLAN phone. This triggers the VoIP gateway to signal to the serving telephony switch, on behalf of the user, to transfer the call to the number corresponding to the DN of the same terminal in the wireless network. At the moment of transfer, tones are inserted in the call path by the VoIP gateway to signal to the call party that the transfer will take place.

Alternatively, the user of the WLAN terminal can proactively request the call transfer to the cellular DN and switch over the mode of the terminal

Problem Solved by the Invention:

No handoff of calls between private and public wireless network.

Solutions that have been tried and why they didn't work:

Pico cell used by cellular network but they require the same service provider for both pico and macro cells.

Specific elements or steps that solved the problem and how they do it:

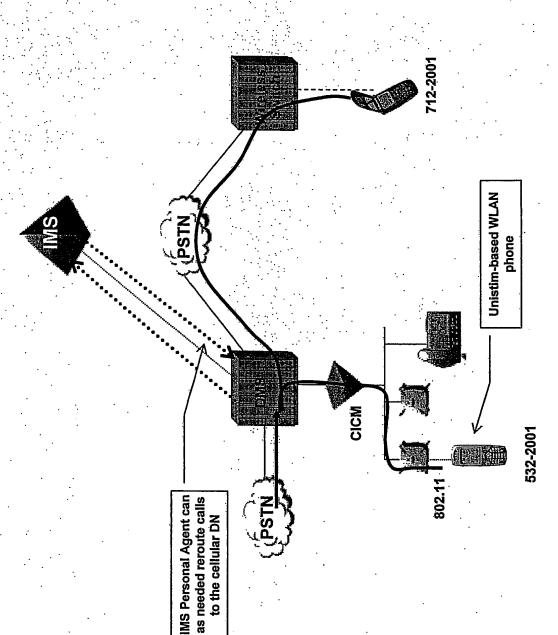
See charts.

Commercial value of the invention to Nortel and Nortel's major competitors:

Allow users to have mobility from office/home to public network with minimum impact on active call, Provide synergies between wireline and wireless network solutions.

MLAN CentrexIP

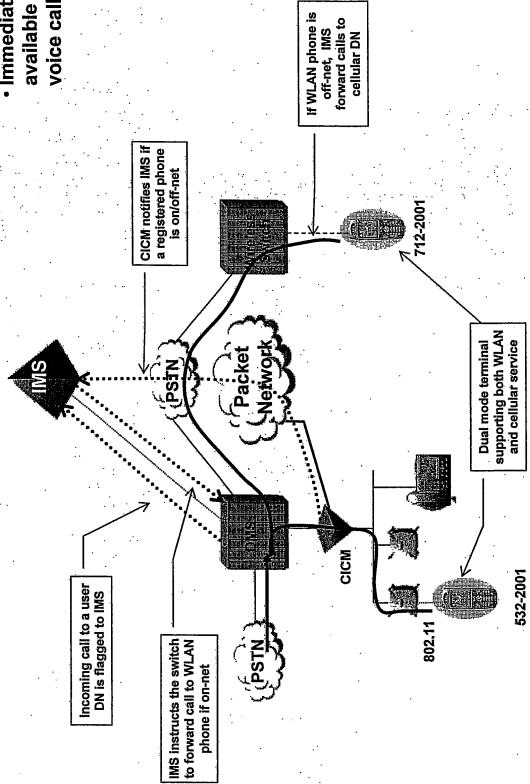
 Office mobility with full Centrex feature set



NORTEL NETWORKS CONFIDENTIAL

WLAN CentrexIP Roaming

Immediate routing to best available connection for



Slide 1

WLAN CentrexIP with handover

· Automatic handoff of calls to cellular as needed his previous WLAN DN can be routed to reconnected with switch also use IMS calls to the cellular User answers call Personal Agent, If the wireless the WLAN DN and gets call party User moves outside the WLAN zone 712-2001 Packet Networ PSTN of the user off-net **CICM notifies IMS** status for future incoming calls Call Transfer 772-2004 CICM 532-2001 802.11 CICM detects when users of the action of user. Tones are transfer on behalf VolP error rate is inadequate and inserted to alert requests a call

Slide 2

Appendix C

4006 E. Highway 54
Dept. N237, MS D16/02/0E2
Network Center 2
Durham, North Carolina 27713
Tel 919.997.3479
Fax 919.997.6659
rwitcher@nortelnetworks.com

www.nortelnetworks.com

John R. Witcher, III Senior Counsel

NORTEL NETWORKS CONFIDENTIAL & PRIVILEGED COMMUNICATION

June 20, 2003

VIA FEDERAL EXPRESS

Benjamin S. Withrow, Esq. Withrow & Terranova 201 Shannon Oaks Circle Suite 200 Cary, NC 27512

Re:

Invention Docket No.: 16076ROUS01P/16076ROUS02U
Title: WLAN Call Handoff to Wireless Using Dynamically

Assigned Temporary Number
Target Filing Date: September 20, 2003

Dear Ben:

Nortel Networks would like to retain you to prepare and file in the United States Patent and Trademark Office (USPTO) a utility patent application claiming priority to the above-referenced provisional application (60/472,277 filed May 21, 2003) and directed to the invention disclosed in the enclosed invention disclosure by the above-referenced filing date. The application should be prepared according to Nortel Networks guidelines in accordance with the predetermined fee we have agreed with your firm. If you are unable to perform the requested work, please advise me immediately.

In addition to the invention disclosure, an invention disclosure Review Summary document is enclosed for your consideration. We request that you contact the primary inventor, Dany Sylvain, at (613) 763-7925 within two weeks of receiving this letter. Please ensure that the inventor(s) are advised of their responsibilities regarding their duty of candor to the USPTO, as well as any other relevant rules and/or laws including the best mode requirement.

Questions pertaining to substantive issues associated with the application should be addressed with me, while administrative issues associated with the application should be addressed with Theresa Boyce. Please be sure that all communications associated with the application, including billing statements and the application itself bear the above-referenced disclosure number.

Please send a substantially complete and final draft of the application to me along with a completed Nortel Networks Outsource's Patent Application Checklist at least 10 days prior to the above-referenced filing date to provide Nortel Networks' Intellectual Property Law Group sufficient opportunity to review the application prior to filing. You should seek to obtain the signatures on the formal papers from all inventors directly.

Please confirm receipt of this disclosure via facsimile to the above-identified number. Please include your assigned reference number.

Upon filing the application with the USPTO, immediately fax a copy of the application transmittal letter to me, so that we have a record that the application has been filed. Thereafter, please send me a hardcopy of the application as filed along with an electronic copy in Microsoft Word 6.0 readable format on a 3 ½" floppy disk.

Should you have any questions, please call me at (919) 997-3479.

Very truly yours,

Rick Witcher

Enclosures:

Invention Disclosure No.: 16076RO

Review Summary

Patent Application Outsource Checklist

JRW:slw

cc: Dany Sylvain

Appendix D

Jennifer Alkove

From:

Jennifer Rush Alkove [jrush@withrowterranova.com]

Sent:

Wednesday, July 30, 2003 2:59 PM

To: Cc: 'sylvain@nortelnetworks.com'

Bsw (E-mail)

Subject:

First Draft of 16076ROUS02U (our file 7000-271)

Dear Dany:

Please find attached a first draft of the above-referenced patent application. file is protected with the password that we have used in previous applications. have any problems opening the attached file, please let me know. Please review the application and drawings carefully for accuracy and completeness, making any changes, additions, or corrections, if any, directly on the application (or electronically with changes tracked).

Please recall that the application must clearly explain the best mode of practicing the invention for which protection is desired. Also, the application must explain to an individual of ordinary skill in the art how to make and use the invention. After reviewing the application, please forward any comments to Ben Withrow and me. We will then send you a revised draft of the application, along with formal paperwork prepared for your signature. After receipt of the signed paperwork and approval from Nortel's legal department, we will file the application.

Please do not hesitate to contact Ben Withrow or me should you have any questions regarding the application. Thank you for allowing us to be of service to you and for your prompt attention to this matter.

Best regards,

Jennifer Rush Alkove Withrow & Terranova, P.L.L.C. 201 Shannon Oaks Circle, Suite 200 Cary, NC 27511 Ph: (919) 654-4520

Fax: (919) 654-4521

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16076ROUS02U First Draft.zip (...

Appendix E

	paperwork Actual filing received date (Prov.) back	10/24/2003 (5/21/2003)
Formal	paperwork received back	8/29/2003
Formal	<u>ă</u>	8/25/2003
Final draft	received back (IP Law)	8/25/2003 10/23/2003 8/25/2003
tatus Final draff		
Nortel Case Status		8/21/2003
Ž	First draft sent	7/30/2003
Date of	Letter & Fax Confirm	6/23/2003
	Nortel Ref	16076ROUS02U
	Matter ID	7000-271